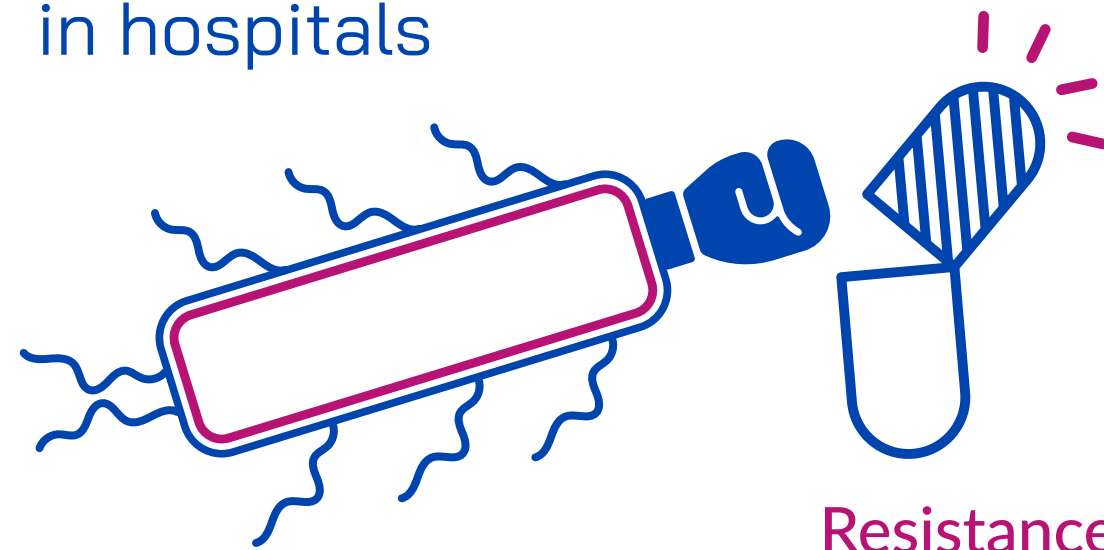


# Optimisation of a membrane-targeting bicyclic heptapeptide for treatment of KAPE infections

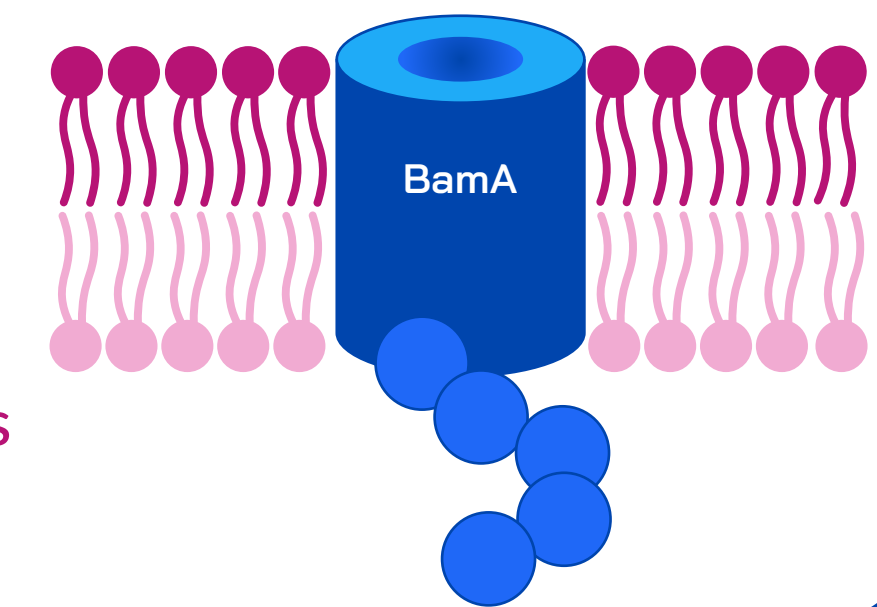
Gram-negative bacteria, like *E. coli* cause severe bacterial infections in hospitals



Resistance is rising

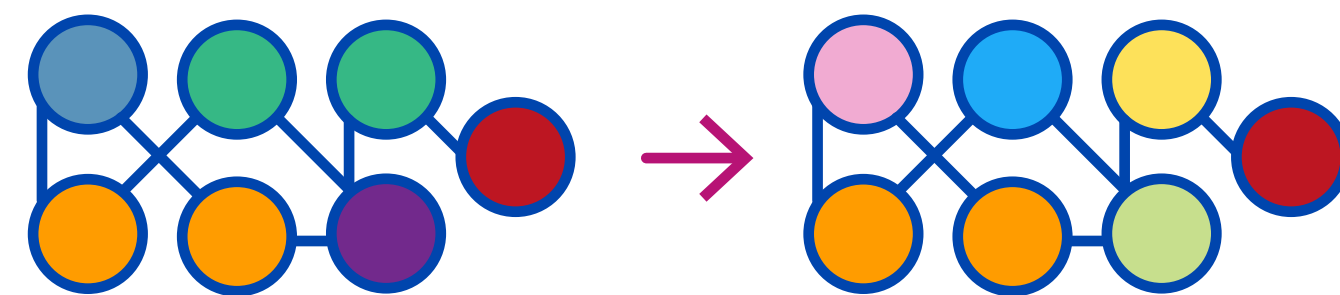
Researchers at Justus-Liebig University Giessen and Infex Therapeutics are addressing multidrug resistance by developing molecules that inhibit a bacterial membrane protein called BamA

The BamA membrane protein is highly conserved across gram-negative bacteria like *E.coli* and hasn't been targeted before



The team has identified a natural product that inhibits the function of BamA

To improve the antibacterial activity of the natural product, the team has made modified versions of it



**PACE**



With funding and support from PACE, the team will continue to optimise the properties of their BamA inhibitors



Success will mean a new class of antibiotic to treat complicated UTIs and potentially other infections caused by multidrug bacteria, including

- Respiratory tract infections
- Bloodstream infections
- Intra-abdominal infections

